

REPORT OF CHANNEL CONDITIONS
400 FEET WIDE OR GREATER
(ER 1130-2-306)

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TO: The Record

FROM: U.S. Army Corps of Engineers
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RIVER/HARBOR NAME AND STATE:
Newark Bay, Hackensack and Passaic Rivers – Main Channel

**MINIMUM DEPTHS IN
CHANNEL ENTERING FROM SEAWARD**

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (nmiles)	DEPTH (feet)				
Reach A: Main Channel South Reach From the junction between Kill Van Kull and Newark Bay Main Channel, approximately 1,400 feet seaward of RED LIGHTED #4 to approximately 3450 feet landward of RED LIGHTED #6.	Map 905 Pg 1,2 & 3 of 8; Dec 5-29 2008, Jan 12-14, 22 & 29, Feb 4 & 10 2009	1,000-1,775	1.32	45	44.8	46.9	45.7	43.3
Reach B: Main Channel Middle Reach From approximately 3450 feet landward of RED LIGHTED #6 to a point approximately 200 feet seaward of RED NUN #16.	Map 905 Pg 3 & 4 of 8; Dec 5-29 2008, Jan 12-14, 22 & 29, Feb 4 & 10 2009	800-1,700	0.88	45	37.7	43.2	36.5	35.4
Reach B1: Main Channel Middle Reach From a point approximately 200 feet seaward of RED NUN #16 to GREEN CAN #19A.	Map 905 Pg 4 & 5 of 8; Dec 5-29 2008, Jan 12-14, 22 & 29, Feb 4 & 10 2009	560-800	0.53	35	38.3	39.1	34.1	28.2
Reach C: Main Channel North Reach From GREEN CAN #19A to a point approximately 3,000 feet landward of Conrail Rail Bridge.	Map 905 Pg 5,6,7 & 8 of 8; Dec 5-29 2008, Jan 12-14, 22 & 29, Feb 4 & 10 2009	500-1,030	1.36	35	13.9	22.1	17.7	6.4

REMARKS:

- All depths are in reference to Mean Low Water (MLW)
- Channel length is in nautical miles.

NEWARK BAY-MAIN CHANNEL

- **Reach A:**
The only occurrence of shoaling in Reach A starts approximately 100 feet landward of RED LIGHTED #4 in the Right Outside Quarter. 1400 feet of shoaling there with a maximum width of 240 feet contains the controlling depth of 43.3 feet on the very right hand margin.
- **Reach B:**
Left side shoaling starts 800 feet landward from the start of the reach. This 1250 foot long shoal is close to the project depth of 45 feet for it's entire length.
A 700 foot shoal starting approximately 850 feet seaward of CHANNEL LIGHT #14 occupies the entire Left Outside Quarter with a minimum depth of 37.7 feet at the midpoint of the shoal.
A 2,900 foot shoal in the Right Outside Quarter starts approximately 850 feet seaward of RED LIGHTED # 14 with a maximum width of 350 to 370 feet at the beginning and end of the shoal. It expands into the Right Inside Quarter where the channel narrows.
- **Reach B1:**
In this reach shoaling only occurs on the right of the channel. The controlling depths of 34.1 feet and 28.2 feet are found at the beginning of the reach, approximately 600 feet landward of the channel narrowing at Channel Light #15. This Right Outside Quarter margin shoaling starts at 250 feet wide and decreases to < 50 feet wide to landward towards Reach C, abeam of Green Can #19.

REMARKS (continued)○ **Reach C**

Minor channel edges (< 50 feet wide) shoaling exists from the beginning of the reach to the Conrail Rail Bridge. Right and left channel shoaling exists around the Conrail Rail Bridge abutments, which is 1100 feet landward of the Newark Bay Bridge. The controlling depths of -13.9 (LOQ) and -17.7 (ROQ) are found here. End of reach shoaling occurs where the reach expands into the turning basin. At its narrowest the unobstructed channel there is 200 feet wide, centered on the Left Inside Quarter. The left inside and outside quarters are clear of shoaling at the bend into the turning basin. A 400 foot wide shoal free channel exists from the left side of the bend into the turning basin toward the first Hackensack River reach on the right side of the turning basin. The approaches to the Passaic River are extensively shoaled to the controlling depth in the Left Inside Quarter of 22.1 feet.

